

REMARKS

Claims 1-10 are presented for examination. Claims 2 and 10 are found allowable subject to being rewritten in independent form.

Claims 1, 3-9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Vijeh et al. in view of Skillin. These rejections are respectfully traversed for the following reasons.

In particular, claim 1 recites a method of configuring a transceiver having an output driver for driving an output terminal to provide data transmission via residential twisted pair wiring, the method comprising the steps of:

setting a DC level at the output terminal for supplying a transmit signal of a prescribed level to the residential twisted pair wiring,

comparing a controlled value representing the DC level with a predetermined threshold level, and

controlling the output driver until the controlled value is equal to the threshold level.

Independent claim 5 recites a transceiver for providing data communications over residential twisted pair wiring, comprising:

- an output driver for supplying a transmit signal of a prescribed level to the residential twisted pair wiring, and

- an output drive control system for comparing a DC level set at the output of the output driver with a predetermined threshold signal to control the output driver so as to maintain the transmit signal at the prescribed level.

In the application of a rejection under 35 U.S.C. § 103, it is incumbent upon the Examiner to factually support a conclusion of obviousness. The Examiner must provide a reason why one having ordinary skill in the art would have been led to modify the prior art or to

combine prior art references to arrive at the claimed invention. *Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.*, 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985). *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *In re Warner*, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967).

These showings by the Examiner are an essential part of complying with the burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

As demonstrated below, the Examiner has failed to provide the requisite reasons for modifying and combining the prior art and thus to establish a *prima facie* case of obviousness.

In particular, the Examiner admits that Vijeh does not disclose the claimed transceiver for providing data communications over residential twisted pair wiring, the output driver for supplying a transmit signal of a prescribed level to the residential twisted pair wiring, and the claimed output drive control system.

However, he contends that “from the preceding information, it would have been obvious...to recognize and implement Vijeh et al. to apply for a transceiver having an output driving an output terminal to provide data transmission via residential twisted pair wiring without effort).

The Examiner does not provide any reasons for modifying the reference.

Considering the reference, Vijeh discloses an interface for providing communications over the Ethernet cabling. The reference does not teach or suggest the transceiver for providing data communications over residential twisted pair wiring and the output driver for supplying a transmit signal of a prescribed level to the residential twisted pair wiring. Therefore, one skilled in the art would have no reason for the modification suggested by the Examiner.

Further, the Examiner admits that the Vijeh system does not disclose:

- setting a DC level at the output terminal for supplying a transmit signal of a prescribed level to the residential twisted pair wiring,

- comparing a controlled value representing the DC level with a predetermined threshold level, and

- controlling the output driver until the controlled value is equal to the threshold level.

The Examiner relies upon Skillin for disclosing these steps of claim 1, and for disclosing the output drive control system for comparing a DC level set at the output of the output driver with a predetermined threshold signal to control the output driver so as to maintain the transmit signal at the prescribed level, as claim 5 requires.

The Examiner takes the position that it would have been obvious to combine teachings of Vijeh and Skillin “for controlling the current of the device.” The Examiner does not identify the device that he suggest to control. It appears that he means the device of Skillin.

Considering this reference, Skillin discloses a telegraph transmitter with line isolator. As the Examiner appears to recognize, this reference neither teach nor suggest data transmission over the Ethernet cabling.

Therefore, there is no reason to use the Vijeh’s teaching for controlling the current of the Skillin’s device. It is noted that no reasons exist for using the Skillin’s teaching for controlling the current of any device of Vijeh.

Accordingly, the Examiner’s reasons for combining Vijeh with Skillin are completely unwarranted.

Hence, the Examiner has failed to provide requisite reasons for modifying Vijeh and has failed to provide requisite reasons for combining Vijeh with Skillin.

Therefore, he has failed to establish a *prima facie* case of obviousness.

The Examiner has apparently failed to give adequate consideration to the particular problems and solution addressed by the claimed invention. *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 15 USPQ2d 1321 (Fed. Cir. 1990); *In re Rothermel*, 276 F.2d 393, 125 USPQ 328 (CCPA 1960). Specifically, the claimed invention is directed to an arrangement that enables computers to be linked together using conventional residential twisted pair telephone lines, instead of established local area network media, such as the LAN disclosed by Vijeh. This arrangement provides the advantage that existing telephone wiring in a home may be used to implement a home network environment. However, telephone lines are inherently noisy due to spurious noise caused by electrical devices in the home, for example dimmer switches, transformers of home appliances, etc. In addition, the twisted pair telephone lines suffer from turn-on transients due to on-hook and off-hook and noise pulses from the standard Plain Old Telephone System (POTS) telephones, and electrical systems such as heating and air conditioning systems, etc. Therefore, the present invention suggests the claimed method and apparatus for controlling the output driver to support data transmission over the residential twisted pair wiring in noisy conditions.

None of the prior art references addresses the problem of data transmission over residential twisted pair wiring. Therefore, they don't need the solution provided by the claimed method and apparatus.

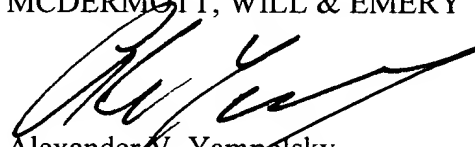
Accordingly, Applicants submit that the lack of any motivation for the proposed combination of references to arrive at the claimed invention, coupled with the particular problems addressed and solved by the claimed invention, undermine the basis for the Examiner's rejection under 35 U.S.C. § 103. Applicants, therefore, respectfully request that the rejection under 35 U.S.C. § 103 is improper and should be withdrawn.

In view of the foregoing, and in summary, claims 1-10 are considered to be in condition for allowance. Favorable reconsideration of this application is respectfully requested.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT, WILL & EMERY

A handwritten signature in black ink, appearing to read 'Alex Yampolsky', written over the printed name.

Alexander V. Yampolsky
Registration No. 36,324

600 13th Street, N.W.
Washington, DC 20005-3096
(202) 756-8000 AVY:
Facsimile: (202) 756-8087
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